

## CLAIMS

What is claimed is:

- 1 1. A method of yield improvement for manufactured products, comprising:
  - 2 A) providing an identification plan for parts, whereby each part is given  
3 unique and traceable identification data;
  - 4 B) providing an identification plan for processing equipment by which each  
5 piece of equipment is given unique and traceable identification data;
  - 6 C) providing a database into which said parts identification data and said  
7 processing equipment identification data are stored, and related;
  - 8 D) processing said parts in at least one processing stage by said processing  
9 equipment to yield processed parts;
  - 10 E) testing said processed parts for defects and performance characteristics;
  - 11 F) identifying problems through said testing of said processed parts;
  - 12 G) retrieving said related parts identification data and said processing  
13 equipment identification data from said database;
  - 14 H) analyzing said data to trace said parts to said processing equipment and to  
15 determine what corrections and repairs to said processing equipment may be necessary;
  - 16 I) making corrections and repairs to processing equipment to correct said  
17 problems; and
  - 18 J) confirming improvement to yield of said manufactured products.

1    2.     The method of claim 1, wherein:  
2            said identification plan for parts of A is achieved by assigning numbers to batches  
3    of parts and further assigning data related to positions within said batch of parts.

1    3.     The method of claim 1, wherein:  
2            said database of C is accessible from multiple computer terminals.

1    4.     The method of claim 3, wherein:  
2            said multiple computer terminals are located in separate facilities.

1    5.     The method of claim 4, wherein:  
2            said multiple computer terminals are connected by the Internet.

1    6.     The method of claim 4, wherein:  
2            said multiple computer terminals are connected by an intranet.

1    7.     The method of claim 1, wherein:  
2            said processing equipment of B is located in more than one manufacturing  
3    facility.

1     8.     The method of claim 1, wherein:

2             said testing of said processed parts of E is done in a separate manufacturing  
3     facility from the one in which at least one of said at least one processing stage is  
4     performed.

1     9.     The method of claim 1, wherein:

2             said testing of said processed parts of E includes shipping finished manufactured  
3     products to consumers and monitoring field problems.

1     10.    The method of claim 1, wherein:

2             said identifying problems of said processed parts of F includes shipping finished  
3     manufactured products to consumers, monitoring field problems and inspecting returned  
4     products.

1     11.    The method of claim 1, wherein:

2             said identifying of problems of said processed parts of F includes tracing parts  
3     downstream to monitor performance of parts from a processing machine which is  
4     suspected of having problems.

1     12.    The method of claim 1, wherein:

2             said identifying of problems of said processed parts of F includes tracing parts  
3     upstream to correct performance of a processing machine which is suspected of causing  
4     problems.

1 13. The method of claim 1, wherein:  
2 said identifying of problems of F includes sending ahead parts from a main batch  
3 to test performance of the main batch.

1 14. A method of yield improvement for HDDs, comprising:

2 A) providing an identification plan for parts, whereby each part is given  
3 unique and traceable identification data;

4 B) providing an identification plan for processing equipment by which each  
5 piece of equipment is given unique and traceable identification data;

6 C) providing a database into which said parts identification data and said  
7 processing equipment identification data are stored, and related;

8 D) receiving disk cassettes;

9 E) inputting disk identification data from disk batches and position data into  
10 said database;

11 F) processing said disks in at least one processing stage by said processing  
12 equipment to produce HDDs;

13 G) testing said HDDs for defects and performance characteristics;

14 H) identifying problems through said testing of said HDDs;

15 I) retrieving said related disk identification data and said processing  
16 equipment identification data from said database;

17 J) analyzing said data to trace said HDDs to said processing equipment to  
18 determine what corrections and repairs to said processing equipment may be necessary;

19           K)     making corrections and repairs to processing equipment to correct said  
20     problems; and

21           L)     confirming improvement to yield of said HDDs.

1     15.     The method of claim 14, wherein:  
2           said database of C is accessible from multiple computer terminals.

1     16.     The method of claim 15, wherein:  
2           said multiple computer terminals are located in separate facilities.

1     17.     The method of claim 16, wherein:  
2           said multiple computer terminals are connected by the Internet.

1     18.     The method of claim 16, wherein:  
2           said multiple computer terminals are connected by an intranet.

1     19.     The method of claim 14, wherein:  
2           said processing equipment is located in more than one manufacturing facility.

1     20.     The method of claim 14, wherein:  
2           said testing of said HDDs of G is done in a separate manufacturing facility from  
3     the one in which at least one of said at least one processing stage is performed.

1 21. The method of claim 14, wherein:  
2 said testing of said HDDs of G includes shipping finished manufactured products  
3 to consumers and monitoring field problems.

1 22. The method of claim 14, wherein:  
2 said identifying problems of said HDDs of H includes shipping finished  
3 manufactured products to consumers, monitoring field problems and inspecting returned  
4 products.

1 23. The method of claim 14, wherein:  
2 said identifying of problems of said HDDs of H includes tracing parts  
3 downstream to monitor performance of parts from a processing machine which is  
4 suspected of having problems.

1 24. The method of claim 14, wherein:  
2 said identifying of problems of said HDDs of H includes tracing parts upstream to  
3 correct performance of a processing machine which is suspected of causing problems.

1 25. The method of claim 14, wherein:  
2 said identifying of problems of said HDDs of H includes sending ahead parts  
3 from a main batch to test performance of the main batch.